

SN 10/792,090

R E M A R K S

The Examiner had variously rejected claims 1-20 under Sections 102 and 103 based on Tai patent 5854872, Large patent 6043936 and Katsu patent 6692133.

The Examiner is correct in so far as the Tai patent does, in fact, disclose: a light guide plate have a first (exit) surface and second (reflective) surface; exit and reflective surfaces facing each other; exit and reflective surfaces each containing prism patterns; and prism patterns on the first and second surfaces that are at right angles to one another.

The Examiner had conceded, however, that Tai "does not specifically teach . . . a concavo-convex pattern . . . a triangular cross-sectional shape . . . [or, p. 5,] a vertex angle range . . .". Nevertheless, the Examiner had rejected those claims directed to a the concavo-convex pattern, a desired vertex angle or a range of vertex angles as something that would be obvious to one skilled in the art. Applicant respectfully disagrees.

Claims 1 - 20 have been cancelled and new claims 21-31 added to distinguish over the Tai reference as well as the combinations of Tai with Large patent 6043936 and Katsu patent 6692133.

With respect to claim 21, this claim distinguishes over the references in specifying that the vertex angles of the prism structures on the first and second main (i.e., the exit and reflecting) surfaces are different from one another. See applicant's specification, inter alia at

SN 10/792,090

paragraphs 0050 and 0051, wherein it is explained that different vertex angles at ridges 156c and 164c give rise to improved brightness: "The light guide plate 100 may provide improved brightness by adjusting the third angle Θ_3 . . . and the sixth angle Θ_6 ". This is demonstrated in Table 1 for exemplary the value of obtuse angle $\Theta_3=108^\circ$ and obtuse angle $\Theta_6 = 135^\circ$, respectively. There is no comparable teaching in the prior art of record concerning achieving improved brightness by employing different vertex angles in the prism structures on the exit and reflecting surfaces. Accordingly, since all of applicant's claims define prism structures having different vertex angles newly-added claims 21et seq define patentably distinct structures and should be allowable as presently constituted.

More particularly, with respect to claim 23, which recites a range-of-vertex-angles limitation from 100° to 120° , the Examiner's previous reliance on the holdings of *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) or *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) is not well taken. The Examiner had stated that "discovering an optimum value of a *results effective variable* involves only routine skill in the art" (Italics supplied). While this is a statement of good law, the complete statement has a preamble which the Examiner may not have fully consider. The italicized words, *results effective variable*, appear in fuller context in MPEP Section 2144.05 (dealing with obviousness of ranges) as follows: A particular parameter must first be recognized as a *result-effective variable*, i.e., a variable which achieves a recognized

SN 10/792,090

result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In this regard, the Examiner has failed to show that vertex angles are a "results-effective variable", because none of the references teach that variation in the vertex angle will have any beneficial effect on applicant's discover that variation in vertex angle has the effect of improving the brightness of the light guide plate. Thus, there is no basis for basing a rejection on the presence of a "results-effective variable" since there is no showing in the art that selecting the appropriate vertex angle is such a variable. More specifically, there is no showing in the art that the vertex angles of the prisms on the exit and reflective surfaces should differ. Accordingly, claim 23 et seq which define unique characteristics for the range of vertex angles, should be allowable.

Newly-added claim 29 recites that the first and second prism surfaces include a concavo-convex pattern. Previously, the Examiner had rejected claim 9's recitation of a concavo-convex pattern based on citation to the Large patent, stating that "Large teaches a light guide plate having a plurality of first prisms 2 (Figs. 1 & 4) including first and second prism surfaces with concavo-convex patterns". Actually, Large teaches a structure having rows of prismatic pyramids having concavo-convex surfaces. Claim 29 distinguishes over the Large reference inter alia in that applicant's first and second triangular prisms are aligned on facing surfaces whereas Large's prisms are all on one surface and in that

SN 10/792,090

applicant's prism's concavo-convex surfaces are on an elongated surface of the triangular prisms.

In the light of the foregoing discussions, all of applicant's currently submitted claims should be held to be in condition for allowance.